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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/780,755	02/08/2001	Chris O'Rourke	062891.0460	6618

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EXAMINER

SHINGLES, KRISTIE D

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 07/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/780,755

Applicant(s)

O'ROURKE ET AL.

Examiner

Kristie Shingles

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 2 and 4-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 10-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 2-9 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 February 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 03/08/2001.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

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DETAILED ACTION

Claims 1-14 are pending.

Priority

1. Applicant has complied with the conditions for receiving the domestic priority benefit of an earlier filing date under 35 U.S.C. 120 from Application No. 09/742,604, filed on 12/21/2000.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 02/08/2001 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the Office. An initialed and dated copy of Applicant's IDS form 1449 is attached to the instant Office action.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 18 of Fig.1 and 600 of Fig.6.

Corrected drawing sheets, or amendment to the specification to add the reference character(s) in the description, are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures

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appearing on the immediate prior version of the sheet, even if only one figure is being amended.

The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37

CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not

accepted by the examiner, the applicant will be notified and informed of any required corrective

action in the next Office action. The objection to the drawings will not be held in abeyance.

Species

4. Applicant is required under 35 U.S.C 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently in the instant application, Group I contains species 2-9 with claim 1 as the generic claim.

a. Group I contains claims directed to the following patentably distinct species of the claimed invention:

- Species 1: claim 2.
- Species 2: claim 3.
- Species 3: claim 4.
- Species 4: claim 5.
- Species 5: claim 6.
- Species 6: claim 7.
- Species 7: claim 8.
- Species 8: claim 9.

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Restriction election

5. The Office acknowledges the receipt of Applicant's restriction election, discussed over the telephone with Atty. Tod Casen on 07/07/2004. Applicant elects with traverse claim 3 from Group 1 (claims 2-9). Hence, claims 1, 3, and 10-14 are pending and will be examined in the instant application. Claims 2, and 4-9 are nonelected and therefore will not be examined.

Double patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1 and 10-12 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 19 of copending Application No. 09/781,522. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims are significantly equivalent save for the following differences:

a. Per claim 1, claim 19 of copending application discloses an "internal" control block and an extended function of the main pool header;

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b. Per claims 10-12 collectively, claim 1 of copending application discloses different statutory class and matter in preamble, extended features of subpool with "header" and "pointer" and extended uses of connection block for "server load balancing" and "free or allocated" feature.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

9. Claims 3, 13 and 14 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 3, 19 and 20, respectively of copending Application No. 09/781,522.

a. Per claim 3, both applications disclose: a system as in claim 1, wherein said control block has first IP address property.

b. Per claim 13, claim 19 of the copending application identically disclose: a method of allocating memory for a client network address translation (NAT) pool, said method comprising the steps of: creating an internal control block that represents said client NAT address range; creating a main pool header; allocating at least one subpool header having a subpool memory block containing one or more fixed-length connection blocks that are allocated within said subpool memory block, said connection blocks containing client NAT addresses, said

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subpool header being referenced by said main pool header; wherein said client NAT address ranges remain allocated within said subpool memory until the entire subpool is freed.

c. Per claim 14, claim 20 of the copending application identically discloses in the form of means-plus-function limitations in the claim: a memory allocation system for a computer, said system comprising: a memory pool; a control block, said control block constructed and arranged to contain at least two parameters; one of said parameters for said control block being an address for said memory pool; means for accepting user input parameters, said input parameters being contained in said control block; and means for creating a client network address translation subpool within said memory pool, said means for creating said client NAT subpool including means for allocating addresses within said client NAT address range, means for freeing said addresses in said client NAT address range, and means for deallocating said client NAT address range; wherein said client NAT address range remains allocated within said subpool until all of said addresses with said client NAT address range have been freed.

This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Specification

10. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code (See page 3, for example). Applicant is required to delete all embedded hyperlinks and/or other form of browser-executable code. See MPEP § 608.01.

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Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. Claims 1, 3, and 10-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Albert et al (U.S. 6,650,641).

a. Per claim 10, Mayes et al teaches a method of allocating memory for a client network address translation (NAT) pool, said method comprising the steps of:

- configuring a client network address translation (NAT) address range (col.17 lines 6-54; range of flows are defined for use by service manager);
- allocating said client NAT address range (col.17 lines 17-24; ranges are specified by the netmasks and the source and destination addresses);
- allocating memory for a memory pool(col.9 lines 46-52 and col.10 lines 14-21; forwarding agent and service manager comprise memory);
- creating said memory pool (col.9 lines 46-52 and col.10 lines 14-21; presence of forwarding agent and service manager memory mediums imply a collection of memory, hence a memory pool);
- creating a subpool within said memory pool, said subpool containing a subpool memory block containing one or more connection blocks that are allocated within said subpool, said subpool constructed and arranged to contain client NAT addresses within said client NAT address range(Abstract, Fig.7, col.6 line 57-col.7 line 57, and col.17 lines 6-16; TCP connection of service manager and affinities contain addresses);
- wherein said client NAT address range remains allocated within said subpool until said subpool is freed (col.16 line 57-col.17 line 67; affinities include time to

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live feature which determines when deallocation occurs after a defined time period which could comprise or be based upon the freeing of the subpool).

b. Per claim 11, Albert et al teaches the method according to Claim 10, wherein said step of creating a subpool further comprises the steps of: initializing said subpool; allocating an interval within said subpool with at least one block; and initializing said at least one block with client NAT addresses (Fig.7 and col.17 lines 6-46; wildcard affinities are configured to include protocol information, addresses, port information, and netmask information).

c. Per claim 12, Albert et al teaches the method according to Claim 10, wherein said step of creating a subpool further comprises the steps of: allocating a new connection block in said memory pool; allocating said new connection block to subpool (col.10 line 57-col.11 line 32; allocation of a new connection takes place in the service manager which selects the machine that handles the connection to communicate from the client to the selected machine, this action involves the use of wildcard affinities).

d. Per claim 1, Albert et al teaches a method of allocating memory for a client network address translation (NAT) pool, said method comprising the steps of:

- creating a control block that represents said client NAT address range (col.17 lines 6-54; range of flows are defined for use by service manager where ranges are specified by the netmasks and the source and destination addresses);
- creating a main pool header, said main pool header having an address referenced in said control block (col.18 line 47-col.19 line 60; service message header has addresses referenced in the service manager and segment header);
- allocating at least one subpool header having a subpool memory block containing one or more fixed-length connection blocks that are allocated within said subpool memory block, said connection blocks containing client NAT addresses, said subpool header being referenced by said main pool header (col.19 lines 24-60; service message header has segment headers that reference wildcard affinities);

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- wherein said client NAT address ranges remain allocated within said subpool memory until the entire subpool memory is freed (col.16 line 57-col.17 line 67; affinities include time to live feature which determines when deallocation occurs after a defined time period which could comprise or be based upon the freeing of the subpool).
- e. Per claim 3, Albert et al teaches a method as in Claim 1, wherein said control block has a first IP address property (Fig.10F and col.28 lines 34-50; fixed affinity has a source IP address property along with a destination IP address).
- f. Claim 13 contains similar limitations to Claim 1 and is therefore being rejected under the same basis.
- g. Claim 14 contains similar limitations to Claim 1 and is therefore being rejected under the same basis.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Brendel et al (U.S. 5,774,660) disclose a world-wide-web server with delayed resource-binding for resource-base load balancing on a distributed resource multi-node network.
- b. Mayes et al (U.S. 5,793,763) disclose a security system for network address translation systems.
- c. Hamamoto et al (U.S. 6,038,233) disclose a translator for IP networks, a network system using the translator, and an IP network coupling method.
- d. Colby et al (U.S. 6,006,264) disclose a method and system for directing a flow between a client and a server.

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e. Cudak et al (U.S. 5,862,452) disclose a method, access point device and peripheral devices for low complexity dynamic persistence mode for random access in wireless communication system.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie Shingles whose telephone number is 703-605-4244. The examiner can normally be reached on Monday-Friday 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 703-305-4003. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kristie Shingles
Examiner
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kds


RUPAL DHARIA
SUPERVISORY PATENT EXAMINER

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